

EXHIBIT A

(Transcript)

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION

STERIGENICS U.S. LLC,
Plaintiff,

Civil Action No.

vs.

1:20-cv-01382-SEG

COBB COUNTY, GEORGIA;
NICHOLAS DAWE, Fire Marshal of
Cobb County, Georgia, in his
Individual Capacity; and KEVIN
GOBBLE, Development and
Inspections Division
Manager and Chief Building
Official of Cobb County,
Georgia, in his Individual
Capacity,

Defendants.

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VIDEO DEPOSITION OF

GUY ROBERT COLONNA

July 27, 2022

10:01 a.m.

Suite 1600  
100 Galleria Parkway  
Atlanta, Georgia

S. Julie Friedman, CCR-B-1476

APPEARANCES OF COUNSEL

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Also Present:

Nicholas Dawe, Fire Marshal  
Kevin Gobble, Chief Building Official  
Jason Silling, Videographer

1 INDEX OF EXAMINATIONS

2 WITNESS:

3 Guy Robert Colonna

Page

4 CROSS-EXAMINATION

6

5 By Mr. Grantham

6 INDEX TO EXHIBITS

7 Plaintiff's

8 Exhibit Description Page

9 Exhibit 371 7-18-22 Notice of Deposition of 7  
Guy Colonna

10 Exhibit 372 6-27-22 Expert Report of Guy 29  
Colonna, P.E. Pursuant to  
11 Federal Rule of Civil Procedure  
26(a) (2) (B)

12 Exhibit 373 4-30-21 Letter, to Colonna, from 84  
13 Bentley, RE: Sterigenics v. Cobb  
County, Georgia, et al. (Page 1  
14 of Engagement Letter)

15 Exhibit 374 Composite Exhibit of Cover 87  
Letters and Invoices Beginning  
16 with 6-3-22 Letter, to Johnson,  
from Colonna, RE: Sterigenics v.  
17 Cobb County, Georgia, et al.

18 Exhibit 375 Contents of Witness's Two Yellow 91  
Folders

19 Exhibit 376 Composite Exhibit of Handwritten 99  
20 Notes by Colonna During  
Telephone Calls with Defendants  
21 and Their Counsel

22

23

24

25



1 INDEX TO PREVIOUSLY MARKED EXHIBITS

2 Plaintiff's

Exhibit Description Page

3 Exhibit 47 9-8-15 HAZARD EVALUATION REPORT, 82  
4 Revision 1 by SSOE  
5

(Original Plaintiff's Exhibits 371 through 376  
6 and a photocopy of previously marked Plaintiff's  
Exhibit 47 have been attached to the original  
7 transcript.)  
8  
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1 (Plaintiff's Exhibit 371 was marked for  
2 identification.)

3 THE VIDEOGRAPHER: We are going on the  
4 record at 10:01 on July 27th, 2022. This is the  
5 Media Unit 1 of the video-recorded deposition of  
6 Guy Colonna taken by Counsel Thomas Grantham, In  
7 the Matter of Sterigenics U.S., LLC versus Cobb  
8 County, Georgia.

9 This deposition is being held at Freeman  
10 Mathis & Gary located at 100 Galleria Parkway,  
11 Atlanta, Georgia.

12 My name is Jason Silling. I am the  
13 videographer from Veritext. The court reporter  
14 is Julie Friedman from the firm Veritext.

15 Counsel and all present in the room will  
16 now state their appearances and affiliations for  
17 the record.

18 If there are any objections to proceeding,  
19 please state them at the time of your  
20 appearance, beginning with the noticing  
21 attorney.

22 MR. GRANTHAM: Thomas Grantham with  
23 Alston & Bird on behalf of Sterigenics.

24 MR. MASSEY: Clay Massey for Sterigenics.

25 MR. CHOY: Sun Choy on behalf of

1 Defendants.

2 MR. JOHNSON: Brian Johnson on behalf of  
3 Defendants.

4 MR. WINGLER: Jamie Wingler on behalf of  
5 Defendants.

6 THE VIDEOGRAPHER: And will the court  
7 reporter please swear in the witness.

8 GUY ROBERT COLONNA, having been first duly  
9 sworn, was examined and testified as follows:

10 CROSS-EXAMINATION

11 BY MR. GRANTHAM:

12 Q. Mr. Colonna, good morning.

13 A. Good morning, sir.

14 Q. I'm Thomas Grantham. I'm going to be  
15 taking your deposition today. Very nice to meet you.

16 You've been deposed before, right?

17 A. Only once, sir.

18 Q. One time. So let's -- There's a couple  
19 ground rules we'll go over just to make sure we get a  
20 good, clean record here.

21 First of all, if I ask a question you  
22 don't understand, please just let me know; and I'll  
23 clarify.

24 And then the second thing -- and this is  
25 important so that Julie here can get a good record --

1 is that we don't speak over each other, so I'll do my  
2 best to let you finish your answer, if you'll do your  
3 best to -- to let me finish my question.

4 Does that sound fair?

5 A. Yes, sir.

6 Q. For the purpose of the record, we've  
7 marked Plaintiff's Exhibit 371, which is a copy of  
8 the deposition notice for you. Is that correct?

9 A. Yes, sir.

10 Q. You've seen that document before?

11 A. I have.

12 Q. And you're here today pursuant to that  
13 notice?

14 A. Yes.

15 Q. You're a chemical engineer, correct?

16 A. Yes, sir.

17 Q. Are you a fire protection engineer?

18 A. I am not.

19 Q. Are you a certified fire protection  
20 specialist?

21 A. I am not.

22 Q. Are you a licensed engineer in the state  
23 of Georgia?

24 A. I am not.

25 Q. So you're an expert in code compliance; is

1     that fair?

2           A.     That's one of the things.  Yes, sir.

3           Q.     What are some of the other things?

4           A.     Characterization and classification of  
5     hazardous materials, as -- as it goes, because that's  
6     where you need to start when you're dealing with  
7     codes that are going to involve storage, handling,  
8     and use of hazardous materials, so you have to  
9     understand basically the characteristics and  
10    properties, so that's also part of my background, I  
11    believe.

12          Q.     Okay.  So apart from classifying hazardous  
13    materials and determining whether a building  
14    complies -- complies with, you know, with  
15    prescriptive code requirements, have you ever been  
16    asked to assess whether an H occupancy facility is  
17    actually safe?

18          A.     No.  I have not.

19          Q.     And that's not part of something you did  
20    in your work for the NFPA?

21          A.     No.  As -- As staff, we didn't do  
22    compliance.  We talked about what the content was,  
23    assisted stakeholders and users of the codes and  
24    standards in what those requirements would look like  
25    in practice; but NFPA staff didn't determine

1 compliance. That's role of the AHJ.

2 Q. And it's -- The advice that you get on  
3 the code application, that's the prescriptive code  
4 application to a facility, correct?

5 A. It is in most instances, unless there are  
6 some documents that have performance-based design  
7 chapters in the codes; and a number of the codes and  
8 standards that I was responsible for did, indeed,  
9 through the latter '90s, into the early 2000s begin  
10 to add performance-based chapters to them so that  
11 there were alternatives to the prescriptive.

12 But, otherwise, most of the work would be  
13 related to prescriptive requirements. Yes, sir.

14 Q. Right. And the performance-based code  
15 provisions, that -- that's different from actually  
16 determining whether performance-based fire protection  
17 safety measures actually create a safe environment,  
18 right?

19 A. I don't understand what you're asking  
20 there.

21 Q. So applying it to a -- a specific  
22 facility, it's different to say what the code says  
23 about performance-based measures and actually  
24 determining whether recommended performance-based  
25 measures at a facility actually achieve safety.

1           A.       In order to go through performance-based,  
2       if that's what you're attempting to do, or even  
3       determine equivalencies, you need to understand what  
4       the prescriptive objective is trying to achieve in  
5       terms of fire or life safety.

6                    If you understand what that basis is and  
7       then you try to -- if you're then -- If your goal is  
8       then to go through and do performance-based or -- or  
9       alternative or equivalent design, you need -- because  
10      you now know what that objective is, what it's trying  
11      to achieve in terms of fire and life safety, you can  
12      try to determine whether these alternative strategies  
13      are creating equivalencies.

14                   So whether you're using the equivalency  
15      clauses, which many of the NFPA codes and standards  
16      have in them, or you're actually doing a full  
17      performance-based chapter in a specific document,  
18      that would be the way you would be able to match  
19      pointers basically, is I know what I achieved here.  
20      The alternative strategies that I've come up with  
21      achieve it or don't achieve it, and you can line  
22      those up.

23           Q.       Okay. Let me ask it this way.

24                    You're not asked to determine whether  
25      performance-based measures installed at a facility

1 provide adequate safety and protection.

2 A. Me personally, I'm not?

3 Q. Yes.

4 A. No. I'm not normally.

5 Q. Okay. You have worked at the NFPA for  
6 about 34 years; is that right?

7 A. Correct.

8 Q. And in 2000, I believe you became the  
9 division manager for industrial and chemical  
10 engineering.

11 A. That's correct.

12 Q. What were your primary duties and  
13 responsibilities in that role?

14 A. At the time -- Okay. That's just a title  
15 change actually. In 1990 I became the chief of the  
16 industrial chemical team. In 2000, the title  
17 changed.

18 So actually, my time as the manager of the  
19 team that was responsible for the inventory of NFPA  
20 codes and standards dealing with either industrial  
21 processes or specific hazardous materials actually  
22 started in October of 1990; and my title then was  
23 chief chemical and marine engineer.

24 It eventually became division manager, as  
25 you point out; and if the date is 2000, based on my



1 resume, then that's what it would have been; but that  
2 was just a title change.

3 So do you want me to answer now what my  
4 roles and responsibilities would have been?

5 Q. Yeah.

6 A. Okay.

7 Q. So going back to 1990, what were  
8 your roles --

9 A. Yeah.

10 Q. -- and responsibilities?

11 A. So I became a personnel manager. The  
12 department at the time had three other engineers.  
13 Two were chemical engineers like myself. One was a  
14 chemist, and that was a team of four.

15 We were -- were responsible for somewhere  
16 on the order of probably 80 or 90 of NFPA's 300 codes  
17 and standards. I was personally responsible for then  
18 as, just like my team, staffing specific committees.

19 And so, again, with my maritime  
20 background, I still had the marine fire protection  
21 documents that I started with in 1986 when I joined  
22 NFPA; and then I began assuming responsibility for  
23 specific documents within the chemical portfolio or  
24 the industrial portfolio.

25 When I say industrial, some of the

1 industrial documents are facilities that are involved  
2 or -- or processes that are involved with hazardous  
3 materials, like spray finishing, for example.  
4 Typically, when you're doing spray finishing, whether  
5 it's automotive or pleasure boats or whatever, you're  
6 using flammable material, flammable liquids, and  
7 things like that.

8 So while that wasn't a unique chemical  
9 material like flammable gasses or flammable liquids  
10 or combustible dust, it was -- it -- it involved  
11 industrial processes that had use of, again,  
12 hazardous materials of various natures, whether  
13 solids, liquids, or gases.

14 So I began taking on more and more  
15 responsibilities for specific chemical documents or  
16 industrial documents, the first one of them being the  
17 classification document that deals with the -- I've  
18 forgotten the title. It's NFPA 704. It's a document  
19 that describes the criteria for specifying.

20 And I believe you're aware, because the  
21 Sterigenics facilities has some of these placards,  
22 the square on point. People describe it as a  
23 diamond. It's the blue, red, yellow field with the  
24 white at the bottom. I was responsible for the  
25 committee that dealt with that document.

1           Q.     When you say you were responsible for the  
2 committee that dealt with the document, does that  
3 mean that you are overseeing the drafting of that  
4 document?

5           A.     I am the staff supporting the committee,  
6 so I have both kind of a technical role and an  
7 administrative role.

8                     Administratively, the committee is  
9 volunteer stakeholders. The -- They have to go  
10 through the steps necessary for developing either a  
11 brand new document or revised documents on the  
12 frequency that the NFPA process goes through, usually  
13 every three to five years.

14                    So I administer procedurally what they do.  
15 Make sure that they -- If somebody submitted a  
16 proposed change, they can't ignore that. They have  
17 to act on it, things like that that kept them in  
18 bounds with the standards procedural.

19                    And then I also, because of my background,  
20 would contribute technical information that I might  
21 be aware of or I could help interpret and make sure  
22 that the committee was -- If they were trying to go  
23 in a direction and they were having trouble getting  
24 in the direction, maybe I could offer that.

25                    I don't vote. I don't get -- I'm not

1 actually the one creating the words. I am taking the  
2 words that the committee comes up with based on  
3 either the input from the process or that they  
4 develop their own, and then making sure that those  
5 are captured.

6 So part of my administrative duty was then  
7 to capture and make sure that all went in, so that it  
8 got into the NFPA process, so we could publish it and  
9 say to the public here's what we're thinking of  
10 doing. You go through the steps; and eventually, you  
11 get an adopted new edition of the document.

12 Q. So is it fair to say that you provided  
13 substantive advice on the contents of NFPA 704?

14 A. Yes.

15 Q. Yeah.

16 A. Yes.

17 Q. Another document you worked on, I believe,  
18 was --

19 You served as the technical staff for the  
20 NFPA committee on hazardous materials.

21 A. NFPA 400.

22 Q. NFPA 400, that's --

23 A. Yes, sir.

24 Q. -- right. And that was first enacted in  
25 2010, I believe?

1           A.     Yes.

2           Q.     In your experience, do you believe that  
3     the NFPA committee on hazardous materials carefully  
4     assessed the potential risk associated with using  
5     hazardous materials in an industrial setting?

6           A.     They --

7                     Ask that question again, please.

8           Q.     Yeah. Do you believe that the NFPA  
9     committee on hazardous materials carefully assessed  
10    the risk associated with using those hazardous  
11    materials?

12          A.     They did not factor in risk necessarily  
13    all the time. They looked at the hazards of the  
14    materials. They looked at the operations.

15                 Part of 400 was an effort, at the time, to  
16    amalgamate the -- some existing hazardous  
17    material-specific documents. NFPA used to have a  
18    separate document on pesticides. I think it was NFPA  
19    434. They had a separate document on oxidizers, NFPA  
20    430. They had a separate document on organic  
21    peroxides, NFPA 432. The --

22                 One of the intents of the hazardous  
23    materials, the creation of NFPA 400, that process,  
24    was to grab those three existing documents on  
25    specific hazards that had existed for a number of

1 years -- I think some of those documents went back --  
2 again, I don't remember exactly -- but maybe into the  
3 '40s and '50s in terms of their origins as separate  
4 documents -- and take those documents and put them in  
5 the framework that was then going to enable NFPA 400  
6 to have some generally applicable sections at the  
7 front that covered and applied to all materials in  
8 terms of their classification and characterization,  
9 the -- how they would get incorporated into the  
10 concept of like the occupancy. Only the NFPA  
11 process, based on the building code, NFPA 5000, which  
12 existed at that time, was to use protection levels.

13 So if you had a specific type of hazard,  
14 one of those classifications of either physical or  
15 health hazards, you then got driven -- and you had in  
16 excess of the threshold quantity, the MAQ, then that  
17 would drive you into one of those protection levels  
18 to have certain precautions that would be added to  
19 just the generic requirements.

20 Then the subsequent chapters in NFPA 400  
21 was then to take explicit chemical classes -- the  
22 oxidizers, the peroxides, the flammable solids, the  
23 unstable reactives, the water reactives, those types  
24 of things.

25 Also, NFPA 400 incorporated NFPA 490,

1 which is the ammonium nitrate document that existed;  
2 and it was, again, aggregated into NFPA 400.

3 So they took those requirements, but they  
4 weren't looking necessarily at -- They weren't using  
5 a strict risk protocol to do that.

6 But the -- the fire and life safety  
7 strategy around hazardous materials for decades has  
8 been around looking at the quantity, the container,  
9 the operation that you're involved in, in terms of  
10 whether you are using it in open containers of --  
11 particularly, if it's a flammable liquid, whether  
12 you're using it in open containers or closed  
13 containers; the separation to -- within the facility,  
14 as well as the separation to other nonindustrial  
15 process-type areas, so take those kinds of -- of  
16 precautions.

17 So there was an aspect of risk in terms of  
18 managing the hazard side of things and the likelihood  
19 of that hazard manifesting itself, 'cause risk is two  
20 things. Risk is the likelihood or probability of an  
21 event, and then it's the consequences.

22 The sense was that the consequences could  
23 be mitigated if you did some of those things that  
24 the -- those various documents exist -- already had  
25 when they got brought into 400 such as managing

1 quantities, such as managing the types of  
2 construction that they were in, the buildings that  
3 they were in, whether they were separate buildings,  
4 whether they were separated buildings, or whether  
5 they were on one footprint all inside the area.

6 So they used a variety of those things,  
7 but they didn't call it risk.

8 So when you ask about risk, I don't know  
9 that it's the strict risk protocol, 'cause not all  
10 committees are necessarily schooled in -- in pure  
11 risk analysis that you would get into if you were in  
12 the process -- if you were actually a process safety  
13 expert.

14 Q. So there's a lot in that answer. And  
15 I just --

16 A. Yeah.

17 Q. -- want to kind of go back to --

18 The question I asked was whether they  
19 carefully assessed risk when determining the  
20 potential risk of those hazards and the use of those  
21 hazards, and I believe you agreed with that --

22 A. Yeah. They --

23 Q. -- as part of the answer.

24 A. Sorry. I didn't mean to talk over.

25 Based on what had come to them either from



1 their own expertise, 'cause, again, as I said, our  
2 committees are made up -- our -- The NFPA committees  
3 are made up of stakeholders from all the different  
4 interest categories, and that includes users.

5 So if it was a hazardous material or a  
6 process involving that, it was the people that were  
7 doing the manufacturing and the people that made the  
8 individual product. They came with their own  
9 knowledge and expertise about those things, along  
10 with researchers, so it could have been people in --  
11 in testing laboratories and all. They all come  
12 together to form the -- the committee and within the  
13 boundaries of the process, and so they would bring  
14 their own knowledge of risk and sit that around the  
15 table.

16 And, also, they could be informed by  
17 incidents that would occur; and examples of that  
18 would be if there was an incident that occurred and  
19 a -- a group like the Chemical Safety Board or OSHA  
20 or EPA, they would -- if they didn't sit on a  
21 committee -- And they sit on many of our committees,  
22 if you look at the -- Particularly, in the  
23 industrial chemical area, it is not uncommon to have  
24 OSHA sitting on a number of those committees. The  
25 Chemical Safety Board sits on some of those

1 committees.

2 So it is not uncommon for them to have  
3 brought that information and shared it with the  
4 committee and said here's something for you to  
5 consider, as you are either developing something new  
6 or if you're looking at developing a -- a -- revising  
7 an existing document.

8 Q. You brought up the fact that NFPA 400, in  
9 part, was an amalgamation of other more specific  
10 standards that relate to specific hazards --

11 A. Yes, sir.

12 Q. -- right?

13 When the NFPA 400 committee was developing  
14 the code or the standards in NFPA 400, they didn't  
15 just accept that whatever was in the codes for those  
16 specific materials was adequate, right?

17 A. That's correct.

18 Q. And they did their own independent  
19 analyses to determine whether those specific  
20 provisions were still adequate?

21 A. Correct.

22 Q. Okay. And as we -- we mentioned, the  
23 committee considered risk associated with specific  
24 hazards when enacting NFPA 400?

25 A. (Witness nods head affirmatively.)

1 Q. Is that a yes?

2 A. I believe so. Yes.

3 Q. Do you believe that the standards under  
4 NFPA 400 adequately protect the public from risks  
5 associated with using hazardous materials?

6 A. So you -- you asked if the standards under  
7 400. 400 is the only -- It's the code, so if you  
8 use 400, it doesn't have standards under it.

9 Q. NFPA 400 has code provisions that apply to  
10 the use --

11 A. Okay.

12 Q. -- of hazardous materials, correct?

13 A. Yes.

14 Q. All right. So I'm asking you whether you  
15 believe those code provisions under NFPA 400  
16 adequately protect the public from the risk  
17 associated with using the hazardous materials covered  
18 by the NFPA 400?

19 A. Yes.

20 Q. You agree with that?

21 A. Yes.

22 Q. You retired from the NFPA in 2020 --

23 A. Correct.

24 Q. -- is that correct?

25 And you now have your own consulting

1 business?

2 A. Yes.

3 Q. FSL Consulting?

4 A. Yes.

5 Q. What kind of projects does FSL Consulting  
6 do?

7 A. I've had some work for individuals in the  
8 petroleum industry in looking at fire protection at  
9 fracking sites, hydraulic frack -- fracking sites.

10 I've had work involving training,  
11 reviewing training materials, developing training  
12 materials, and then delivering training.

13 And then this project.

14 So, again, I have only been doing this  
15 since the beginning of 2021 basically. Didn't engage  
16 in a lot of things with the pandemic right after I  
17 retired at the end of August of 2020, so there  
18 weren't -- And, again, I'm not out soliciting a  
19 bunch of work necessarily, so I'm content to be  
20 retired at times.

21 Q. Oh, good. The -- The fracking sites  
22 project, can you tell me a little bit about that and  
23 what that involves.

24 A. That was referred to me by a former  
25 colleague at NFPA. They -- The company operated --

1 operates a number of fracking sites in Colorado  
2 and -- and the Western U.S., and they had experienced  
3 some situations where some fires occurred.

4 What it amounts to is it is not part of  
5 the drilling process, so it's not involving the oil  
6 or gas that is being produced out of the -- once they  
7 do the hydraulic fracturing. It is the equipment  
8 that goes into that process, so it is --

9 The way they lay out the facilities is  
10 normally to have a number of trucks all aligned  
11 together and -- And then they manifold together.  
12 Those trucks have both their engines, but they are  
13 also running generators.

14 And what had occurred was that they have  
15 diesel-powered generators, and they would end up with  
16 either fuel line ruptures or things like that that  
17 would release either hydraulic fluid or if diesel  
18 fuel. It would impinge on a hot surface; and because  
19 it would be under pressure coming from those lines  
20 that is carrying it to the engine, to the generator,  
21 to the motor, whatever, it would be atomized.

22 And so even though diesel is a higher  
23 flash point material, it would be more easily ignited  
24 on a hot engine surface -- surface; and they would  
25 end up with a fire; and because of the -- the way

1 they lay out those facilities, the fire would spread  
2 very quickly; and they would run the risk of losing  
3 all their equipment.

4 So what they were asking me to do was to  
5 examine that situation and see about what kinds of  
6 recommendations I could make in terms of both  
7 detection and possible suppression methodologies that  
8 they can employ.

9 The trouble that they have is it more  
10 likely they are -- Because they are temporary,  
11 they're only at a fracturing site for a couple of  
12 weeks, they can't go to a typical fixed system that  
13 they would use, so they're probably looking at a -- a  
14 portable trailer with a foam monitor or something  
15 like that.

16 And the big issue is not so much the  
17 suppression, the suppressant. The bigger issue was  
18 probably the detection, because it's important that  
19 they detect it very quickly, because, otherwise, it  
20 spreads very rapidly.

21 So that was the nature of the problem, and  
22 I gave them -- I did some analysis and gave them a  
23 report that said, you know, here's what you might  
24 look at; and that's the end of that one.

25 Q. And so that project is unrelated to code

1 compliance?

2 A. Yes. Yeah. 'Cause there was nothing you  
3 could find in any code that would drive you, other  
4 than when you looked at, for example, the code -- the  
5 NFPA 11, the foam monitor or foam standard. You  
6 could get information about applying foam to similar  
7 hazards. Like flame over combustible liquids, you  
8 could get information about application rates and  
9 things like that; but it was not a code compliance.

10 I was trying to take the bases out of some  
11 codes and then say here's how you might apply this.

12 Q. When you say there's nothing in the code  
13 that you could find that would drive you, do you mean  
14 there's nothing in the code that dictated how to  
15 handle that situation?

16 A. You couldn't look in a chapter in the code  
17 and say fire protection for hydraulic fracturing  
18 sites. That's what I meant, sir.

19 Q. The facility we're here to talk about  
20 today is the Sterigenics facility that sterilizes  
21 medical equipment in Smyrna, Georgia, correct?

22 A. Yes, sir.

23 Q. Have you ever been to that facility?

24 A. I have not.

25 Q. Have you ever driven by the facility?

1           A.     I have not.

2           Q.     Do you know what other businesses are near  
3 the facility?

4           A.     I've forgotten what they are specifically,  
5 but I've read in the documentation that's been  
6 provided as part of this process. I know that it is  
7 attached to other businesses. The -- The facility  
8 is attached to other businesses.

9           Q.     Do you know what -- what a zoning in that  
10 area is?

11          A.     I do not.

12          Q.     And I think we said this earlier. But  
13 you're not a licensed engineer in the state of  
14 Georgia?

15          A.     I am not.

16          Q.     Have you ever been to the state of  
17 Georgia?

18          A.     Many times.

19          Q.     Yeah. For work?

20          A.     Work and pleasure. Went to a Braves games  
21 years ago when they were still at Fulton County  
22 Stadium. Haven't been to the new stadiums, but I --  
23                I've been here in the state for business a  
24 number of times, both attending conferences at  
25 Georgia World Congress and presenting at the Chemical



1 Engineers Conference a number of times over the  
2 years, attending committee meetings hosted by --  
3 either that we held here or that were hosted by some  
4 of the companies that were on the committees.

5 And NFPA had its -- both its fall and  
6 annual conference. When they used to have two  
7 conferences a year, NFPA had their conference in  
8 Atlanta a couple of times so --

9 And I've transferred through. I've --  
10 almost always a Delta flyer, so I've transferred at  
11 Hartsfield Jackson any number of times.

12 Q. Yeah. My apologies.

13 Is it fair to say that one of your  
14 opinions in this case is that under today's code, the  
15 Sterigenics facility would be classified as an H  
16 Occupancy?

17 A. Yes.

18 Q. And by today's code, I mean the codes that  
19 were adopted in the state of Georgia as of August  
20 2019.

21 A. Yes.

22 Q. One of the resources you looked at to  
23 reach that determination is Table 307.1 of Chapter 3  
24 of the International Building Code; is that correct?

25 A. Yes, sir.

1 Q. And under that -- those tables, what is  
2 the maximum allowable quantity of ethylene oxide?

3 A. May I look.

4 Q. Sure.

5 A. Yeah. 'Cause I don't remember the number  
6 for -- The numbers are a little bit different, but  
7 it's small. I've forgotten, so if you don't mind.

8 (Plaintiff's Exhibit 372 was marked for  
9 identification.)

10 Q. (By Mr. Grantham) I've marked Exhibit  
11 372, and that is a copy of your report.

12 A. Yes, sir.

13 Oh, let's see. Unstable reactive gas  
14 liquified Class 4 or Class 3 detonable Group H-1 or  
15 H-2 in storage, the MAQ is 5 pounds. In use, closed  
16 systems, the MAQ is 1 pound; and in use open systems,  
17 the MAQ is 1 pound. That is from Table 307.1, paren,  
18 (1) of the IBC.

19 Q. Okay. And I believe you also discuss some  
20 of the limitations, like flammable gas from Table  
21 307.1 where Group H-2, the MAQ would be 150 pounds --

22 A. That's correct.

23 Q. -- in storage, correct?

24 A. That's at the beginning of that. Yes.

25 Q. Oh.

1 A. Because -- I'm sorry.

2 Q. No. Go ahead.

3 A. Because when you start at the  
4 classification process for ethylene oxide, it is a  
5 flammable gas. However, from the standpoint of the  
6 Sterigenics facility's use of the product, it is  
7 stored in those drums as a liquified flammable gas,  
8 so you would also have to look at the liquified  
9 flammable gas requirement.

10 So I didn't make determinations until I  
11 had looked at all the different pieces that could  
12 apply to the properties of ethylene oxide, so that's  
13 why I did it that way.

14 Q. Well, it's fair to say that according to  
15 your review of those tables, the -- the maximum  
16 allowable quantity of ethylene oxide is 150 -- 50  
17 pounds at -- at most, right?

18 A. Yes. That's correct.

19 Q. And you mentioned the drums that store  
20 ethylene oxide at Sterigenics facility. Do you know  
21 how much ethylene oxide is in one drum?

22 A. They're 55-gallon drums; and when you  
23 convert based on the vapor density -- I'm sorry -- on  
24 the specific gravity, you end up with about -- It's  
25 7.21 pounds per gallon, so you end up with something

1 under 400 -- 400 pounds.

2 Q. Okay. So -- So one drum of ethylene  
3 oxide at Sterigenics' facility is approximately 400  
4 pounds, correct?

5 A. Yeah. Yeah.

6 Q. So having one drum of ethylene oxide at  
7 the facility would make it an H Occupancy under  
8 today's code --

9 A. Yes.

10 Q. -- correct?

11 A. Yes.

12 Q. Would you agree that for any time that  
13 Sterigenics' facility used at least one drum of  
14 ethylene oxide, it would have been classified as an H  
15 Occupancy under today's code?

16 A. Yes.

17 Q. Are you aware of any time in the  
18 facility's history that it used less than one drum of  
19 ethylene oxide?

20 A. Nothing that I've -- I haven't -- I  
21 haven't seen anything other than --

22 Q. You're not aware of any time --

23 A. No. I'm not aware. No, sir.

24 Q. You're not aware of any time that the  
25 Sterigenics facility used less than one drop of

1 ethylene oxide, correct?

2 A. No.

3 Q. And this facility has been using ethylene  
4 oxide to sterilize medical equipment for decades; is  
5 that correct?

6 A. As I understand things, yes.

7 Q. And so the facility's occupancy throughout  
8 that period would always have been classified as an H  
9 Occupancy under today's code?

10 A. Yes.

11 Q. As part of your work in this case, did you  
12 study what fire protection safety measures have been  
13 enacted at the facility?

14 A. Only what is written in other reports such  
15 as the SSOE document from Richard Stehr, I believe,  
16 which was in -- I think he had a revision, which was  
17 September of 2015.

18 Also, in the Q-Dot reports that were done  
19 in '19; and the final one being in 2020.

20 I'm trying to think if there was other --  
21 any other documents that I read about fire  
22 protection.

23 There was an analysis of, I think, the  
24 sprinkler protection that was a separate report that  
25 someone produced. I've forgotten who, where that

1 was; but I remember seeing there was another one that  
2 was specifically on the sprinkler and commodity  
3 classification.

4 Q. Sitting here today, can you tell me what  
5 kind of sprinkler systems are installed at the  
6 facility?

7 A. Not my area of expertise, so I wouldn't  
8 get them all right.

9 Q. And sitting here today, can you tell me  
10 the various gas detection measures that are in place  
11 at the facility?

12 A. I know from what I've read, it was  
13 referenced. I think it was -- I think I read  
14 somewhere that -- whether it was in the SSOE report  
15 or something like that. It was Perkin Elmer, but I  
16 don't know if that's still what is being used, and I  
17 don't know if that was for that application or  
18 whether that's also for the 25 percent LFL and  
19 detections and alerts and alarm systems that are in  
20 place.

21 So I don't know -- If you're talking  
22 about manufacture, I don't know who the manufacturers  
23 are. No, sir.

24 Q. Well, and you haven't studied the  
25 effectiveness of any gas-monitoring system?

1 A. I have not.

2 Q. You haven't studied the effectiveness of  
3 any sprinkler system at the facility?

4 A. I have not.

5 Q. So you can't say sitting here today  
6 whether the facility has adequate safety measures in  
7 place --

8 A. Nope.

9 Q. -- to protect --

10 A. Without -- I would never say that without  
11 actually being at the facility to begin with, and  
12 then some of those areas are not areas in which I am  
13 an expert, so wouldn't be in my purview. No.

14 Q. You mentioned the Q-dot reports just a  
15 moment ago. As part of your work in this case, you  
16 reviewed a couple of Q-Dot reports, correct?

17 A. I did, sir.

18 Q. And I believe your report specifically  
19 mentioned one from December 2019 and another from  
20 March 2020; is that --

21 A. Correct.

22 THE COURT REPORTER: And please. Let him  
23 finish. Okay? 'Cause I'm trying to get this  
24 down.

25 THE WITNESS: Sorry. I thought I had --

1 THE COURT REPORTER: I appreciate it.

2 THE WITNESS: -- let him finish. I'm  
3 sorry.

4 THE COURT REPORTER: Yeah. We're kind of  
5 treading on each other a little bit.

6 THE WITNESS: Okay.

7 THE COURT REPORTER: So I appreciate the  
8 help.

9 Q. (By Mr. Grantham) And I believe you  
10 mentioned in the Q-Dot reports, those included an  
11 assessment of certain of the facility's fire safety  
12 protection measures, correct?

13 A. Yes.

14 Q. And Q-Dot also recommended several  
15 additional safety protection measures to be installed  
16 at the facility, correct?

17 A. Yes.

18 Q. You're not giving an opinion in this case  
19 about whether the recommendations in those Q-Dot  
20 reports are appropriate, are you?

21 A. Explain appropriate.

22 Q. You're not giving an opinion in this case  
23 on whether the recommendations in the Q-Dot report  
24 provide adequate safety protection from fire  
25 incidents or explosions at the facility, correct?



1 A. No.

2 Q. Okay. In your report, you state that,  
3 "Classification as an F-1 (Factory Industrial)  
4 occupancy would not adequately protect the Facility,  
5 workers, or the community in the event of an incident  
6 involving a release of sterilization chemicals."

7 Did I read that correctly?

8 A. Yes.

9 Q. And that's an opinion you have in this  
10 case?

11 A. That is based on the definition of what  
12 F-1 is intended to address, which, as part of the F-1  
13 definition, it specifically excludes facilities that  
14 have quantities of hazardous chemicals.

15 Q. But with respect to the Sterigenics  
16 facility, we've agreed that you haven't done an  
17 assessment of the fire safety protection measures  
18 that are in place at the facility, correct?

19 A. Correct.

20 Q. So your opinion with respect to  
21 classification as an F-1 facility, it's just that  
22 that -- the measures of protection under that  
23 classification and the code are not as robust as they  
24 are under an H Occupancy classification under today's  
25 code, correct?

1 A. That's correct.

2 Q. It's not an opinion as to whether the  
3 Sterigenics facility itself protects the public from  
4 fire incidents or explosion; is that correct?

5 A. That's correct.

6 Q. And do you know who classifies a facility  
7 in this jurisdiction, in Cobb County, who classifies  
8 the facility as a particular occupancy?

9 A. I assume it's the building official as  
10 part of the permitting process.

11 Q. All right. And the classification of a  
12 facility as we've discussed, it -- it's unrelated to  
13 what safety measures are in the building, correct?

14 A. Yes. Because the definitions lay out that  
15 if this is what's being done in there, then this  
16 aligns with F or S. When you put hazardous materials  
17 in there, that drives you to the H, so yes.

18 Q. Right. The presence of hazardous  
19 materials is what drives you to the H.

20 A. Correct.

21 Q. It's -- it's not -- It's not what safety  
22 measures are actually installed at the facility,  
23 correct?

24 A. Correct.

25 But I would say that the identification of

1 this -- the types of additional protections that  
2 would be essential for fire and life safety in  
3 facilities operating, storing, handling, using  
4 hazardous materials would be more clearly driven from  
5 the H Occupancy classification, as opposed to a  
6 situation where you're starting with an F occupancy  
7 definition or a classification, which wouldn't  
8 normally impose those additional safeguards.

9 MR. GRANTHAM: All right. Well, I -- I  
10 object to the nonresponsiveness of the answer  
11 for the record.

12 Q. (By Mr. Grantham) On Page 24 of your  
13 report, you -- you state that you were asked to  
14 determine what code requirements would be applicable  
15 to the Sterigenics facility under Georgia law; is  
16 that right?

17 A. That's where I started. Yes.

18 Q. And I just want to be clear about what you  
19 mean by that, Georgia law. Do you mean the fire and  
20 building codes that Georgia law -- excuse me -- that  
21 Georgia has adopted?

22 A. Yes, sir.

23 Q. Okay. You're not a legal expert here to  
24 give an opinion on whether Sterigenics has a vested  
25 right, for example, to operate a sterilization

1 facility under Georgia law, correct?

2 A. No, sir.

3 Q. Okay. Now you reviewed NFPA 55 in  
4 connection with your report; is that right?

5 A. Yes, sir.

6 Q. And you also reviewed NFPA 400, correct?

7 A. Yes, sir.

8 Q. And NFPA 400 references NFPA 55 as part of  
9 it, doesn't it?

10 A. Yes, sir.

11 Q. And NFPA 55 applies to certain facilities  
12 that use compressed gases or cryogenic fluids; is  
13 that correct?

14 A. Correct.

15 Q. And it specifically applies to facilities  
16 that use ethylene oxide to sterilize; is that  
17 correct?

18 A. Correct.

19 Q. And that is Chapter 14 of NFPA 55, right?

20 A. Correct.

21 Q. And your report, I believe it cites to one  
22 provision of the NFPA 55, Chapter 14, stating that  
23 the maximum quantity of ethylene oxide in  
24 sterilization buildings shall be 10,000 pounds; is  
25 that correct?

1 A. Yes.

2 Q. So looking at Chapter 1 of NFPA 55,  
3 Section 1.4 states that, "The provisions of the code  
4 reflect a consensus of what is necessary to provide  
5 an acceptable degree of protection from the hazards  
6 addressed in this code...."

7 Correct?

8 A. Right.

9 Q. We discussed this earlier. But that  
10 consensus is the NFPA committee reaching an agreement  
11 on what level of protection is necessary under the  
12 code for certain hazards, correct?

13 A. Correct.

14 Q. And so is it fair to say that the NFPA  
15 committee drafting these provisions, they assess the  
16 risk associated with certain types of hazards; and  
17 one of those hazards is the use of ethylene oxide in  
18 sterilization purposes, correct?

19 A. Yes.

20 Q. Your report also discusses Section 1.41 of  
21 NFPA 55, which states that the provision of the code  
22 shall not apply to existing facilities as a general  
23 rule, correct?

24 A. Correct.

25 Q. But there are two exceptions to that

1 general rule, right?

2 And, first, there's Section 1.41 that  
3 states that a certain code provision can specifically  
4 state that it applies retroactively, correct?

5 A. Yes.

6 Q. And the NFPA has, in fact, enacted certain  
7 provisions that do apply retroactively, correct?

8 A. You mean in other documents?

9 Q. In other documents.

10 A. That's correct.

11 Q. Okay.

12 A. They have not chosen to; and I laid that  
13 out in my report, gave examples of instances when  
14 that has -- has occurred.

15 Q. Right. And I believe your report talks  
16 about combustible dust standards as an example of an  
17 area where the NFPA enacted retroactive codes.

18 A. Correct.

19 Q. If we look at the provision we just  
20 discussed in NFPA 55, Chapter 14, the provision that  
21 limits ethylene oxide in the sterilization building  
22 to 10,000 pounds, that provision does not  
23 specifically state that it applies retroactively,  
24 correct?

25 A. That's correct.

1 Q. And none of the provisions in Chapter 14  
2 of the NFPA 55 apply retroactively, correct?

3 A. That is correct.

4 Q. All right. So as a general rule, a  
5 sterilization facility that existed before NFPA 55  
6 was enacted was allowed to store more than 10,000  
7 pounds of ethylene oxide; is that correct?

8 A. Ask that again (ph.) -- again.

9 Q. Yeah. As a general rule, a sterilization  
10 facility that existed before NFPA 55 was enacted was  
11 allowed to store more than 10,000 pounds of ethylene  
12 oxide?

13 A. I would say that's incorrect, because NFPA  
14 560 existed before, so 55 only has Chapter 14.

15 Because in the 2010 edition NFPA 55,  
16 again, like I -- we talked about earlier with NFPA  
17 400 aggregating existing documents, NFPA 55, through  
18 the process of consensus and the committee decisions  
19 and all that, took NFPA 560, which was first  
20 published in 1995, underwent revisions in 2002 and  
21 2007, and moved all of 560 into Chapter 14 of NFPA  
22 55.

23 If you go back to those earlier editions,  
24 I believe even the '95 edition -- I could check it; I  
25 have it here -- even the '95 edition had that same

1 10,000-pound limitation for ethylene oxide; and I  
2 think in the '95 edition, it said sterilization  
3 buildings and special -- special sterile --  
4 sterilization buildings and special sterilization  
5 rooms.

6 That terminology was changed in the 2007  
7 edition of 560 to just sterilization buildings, and  
8 that's what then moved into the Chapter 14 provision  
9 that you are asking me about.

10 Q. Okay. So that's a fair point.

11 NFPA 560 just related to sterilization  
12 buildings in 1995, correct?

13 A. (Witness nods head affirmatively.)

14 Q. And then NFPA 50 --

15 THE COURT REPORTER: And I'm sorry. Were  
16 you nodding your head?

17 THE WITNESS: I'm sorry. Yes.

18 MR. GRANTHAM: Yeah.

19 THE COURT REPORTER: Is that a yes --

20 MR. GRANTHAM: I'm sorry.

21 THE COURT REPORTER. -- sir?

22 THE WITNESS: Yes. Yes.

23 MR. GRANTHAM: Yes.

24 THE WITNESS: I wasn't -- I didn't want  
25 to open my mouth, 'cause I thought he was going



1 to continue; but I'm sorry.

2 THE COURT REPORTER: I understand.

3 THE WITNESS: The answer was yes.

4 Q. (By Mr. Grantham) And then NFPA 55  
5 incorporated the standards that were in NFPA 560,  
6 correct?

7 A. Yes.

8 And when you say standards, you actually  
9 mean the requirements.

10 Q. I do.

11 A. 'Cause every time I hear standards, I  
12 think separate documents. We're only talking a  
13 single document. It's the requirements in that  
14 document, so yes.

15 Q. Okay. So going back to my original  
16 question. Let me rephrase it this way. A  
17 sterilization facility that existed before 1995 when  
18 NFPA 560 was enacted, that sterilization facility was  
19 allowed to store more than 10,000 pounds of ethylene  
20 oxide in the facility, correct?

21 A. I would say that's not correct, because  
22 you would have had the MAQs that existed in the  
23 various building -- building or fire codes that dated  
24 back, as I pointed out in my report, back into the  
25 '80s. You would have had -- They wouldn't have been

1 called MAQs. They would have been called exempt  
2 amounts.

3 But those exempt amounts, if you look at  
4 unstable reactives and in that Fluer report that I  
5 highlighted in my report, the actual historical  
6 transition document for kind of tracing the origins  
7 of MAQs and exempt amounts, there was a table in --  
8 in that report where for unstable reactives, the  
9 amount was -- there was zero for an exempt amount,  
10 which meant that you would have always required a  
11 permit in order to be able to use any amount of  
12 ethylene oxide as opposed to 10 pounds, 1 pound, 50  
13 pounds, 150 pounds. It wasn't until you got to the  
14 formalization of the IFC and IBC that the current  
15 MAQs that we talked about earlier actually emerged.

16 So I would suggest that the 10,000 pounds  
17 wouldn't have been a limit that would have been in  
18 place. It could have been as little as 0 pounds that  
19 would have required from a building or a fire  
20 official to get permitting in order to use EO in --  
21 in those kinds of occupancies.

22 Q. But an MAQ isn't a limitation on the  
23 amount of ethylene oxide you can have in a building,  
24 correct?

25 A. That's correct. It is a trigger for

1 additional fire protection.

2 Q. Right. So if you had more than 10,000  
3 pounds of ethylene oxide in a sterilization facility  
4 prior to 1995 and the AHJ had allowed you to have  
5 that in there, you could then still have over 10,000  
6 pounds of ethylene oxide after the enactment of NFPA  
7 560 in 1995, correct?

8 A. That would be up to the AHJ to decide, but  
9 it's possibly true. Yes.

10 Q. Well, but it's not --

11 The -- The provision that says you can  
12 only have 10,000 pounds, again, we said that does not  
13 apply retroactively as a general rule, correct?

14 A. Correct.

15 Q. And so that provision would not be applied  
16 to a facility that existed before 1995, correct?

17 A. Correct.

18 Q. Okay. So that's the first example we  
19 talked about. The other example that your report  
20 discusses is in Section 1.4.2, correct?

21 And that's in both NFPA 400 and NFPA 55.  
22 And it states that if the AHJ determines that an  
23 existing situation prevent -- excuse me -- presents  
24 an unacceptable degree of risk, the AHJ can apply  
25 portions of the code retroactively, correct?

1 A. Yes.

2 Q. And just to clarify, when we're talking  
3 about the AHJ with respect to the Sterigenics  
4 facility, we are talking about the Cobb County Fire  
5 Marshal's Office, correct?

6 A. Yes.

7 Q. And the Fire Marshal's Office is  
8 ultimately who determines whether a situation at an  
9 existing facility creates an unacceptable degree of  
10 risk, correct?

11 A. Yes.

12 Q. Okay. With regard to the quantity of  
13 ethylene oxide stored at a facility, you would agree  
14 that a facility storing over 10,000 pounds of  
15 ethylene oxide does not necessarily constitute an  
16 unacceptable degree of risk?

17 A. Ask that again.

18 Q. Yeah. With regard to the quantity of  
19 ethylene oxide present at a facility, you would agree  
20 that a facility storing over 10,000 pounds of  
21 ethylene oxide standing alone does not necessarily  
22 constitute an unacceptable degree of risk?

23 A. The requirement, though, is no more than  
24 10,000, so if it's over 10,000, it's not compliant  
25 with the requirement that is in -- whether it's the

1 '95 and subsequent revisions of 560 or 55. It says  
2 the max is 10,000, so anything over that, to me, is  
3 not compliant with that provision.

4 I am permitted, as a facility operating  
5 within either 560 or 55, to have up to 10,000. The  
6 max is 10,000.

7 If I am a facility operating with more  
8 than 10,000, then I don't know whether that's -- that  
9 isn't compliant with that code specification, so  
10 therefore, I don't know if that means it's safe or  
11 not safe.

12 Q. We discussed a moment ago that that code  
13 provision does not apply retroactively?

14 A. Correct.

15 Q. Okay. And so in a situation where the  
16 facility existed before 1995 and was permitted to  
17 have, say, 11,000 pounds of ethylene oxide, that  
18 facility was then allowed to continue using 11,000  
19 pounds of ethylene oxide after 1995, correct?

20 A. I guess so. Yes.

21 Q. And so if having 11,000 pounds of ethylene  
22 oxide presented an unacceptable degree of risk in all  
23 circumstances, you would expect that the NFPA 55  
24 would have applied that provision retroactively,  
25 correct?

1           A.     That would be a way they could have done  
2     that.   Yes.

3                     Again, I don't know what the committee --  
4     what they knew about those considerations, but they  
5     didn't act.

6                     So yes.   It's possible if they thought it  
7     was unacceptable, they could have changed that.

8           Q.     Well, you say you didn't know.   But you  
9     were involved with the creation of NFPA 400, correct?

10          A.     Yes.

11          Q.     And NFPA 400 is an amalgamation, as you  
12     said -- that was your word -- of the code  
13     requirements applicable to certain hazardous  
14     materials, right?

15          A.     Yes.

16          Q.     And one of those hazardous materials is  
17     ethylene oxide for sterilization purposes?

18          A.     Yes.

19          Q.     And you agree that that committee  
20     carefully assessed the risk associated with the use  
21     of hazardous materials?

22          A.     Yes.

23          Q.     And that committee decided not to apply  
24     the 10,000 limitation we just talked about  
25     retroactively, correct?

1 A. Yes.

2 But one other piece. If you look at NFPA  
3 400, Chapter 21 is extracted from 55. That means 400  
4 can't change the requirements in Chapter 21. That is  
5 the purview of the 55 Committee, so NFPA 400 would  
6 not have been the committee that would have modified  
7 things like that. They would have had -- That would  
8 have had to happen in the NFPA 55 Committee --

9 Q. Okay.

10 A. -- because the ethylene oxide requirements  
11 are in Chapter 14 of the NFPA 55.

12 MR. GRANTHAM: All right. I -- I object  
13 to the nonresponsiveness of the answer for the  
14 record.

15 Q. (By Mr. Grantham) But the NFPA 400, we've  
16 already discussed references and refers to NFPA 55,  
17 does it not?

18 A. It extracts Chapter 21 and -- NF -- NF --  
19 Chapter 21 of NFPA 400 is word for word  
20 extracted text from NFPA 55, so in order for NFPA 400  
21 to be complete, rather than reinvent content on  
22 cryogenic fluids and compressed gases, it took from  
23 55 what becomes Chapter 21.

24 Q. So is it fair to say that the NFPA 400  
25 Committee adopted that Chapter 14 --

1 A. That's correct.

2 Q. -- for the NFPA 55 work?

3 A. That's correct.

4 Q. And by adopting that, they determined that  
5 existing facilities could have over 10,000 pounds of  
6 ethylene oxide and not present an unacceptable degree  
7 of risk; is that correct?

8 A. I --

9 Yes.

10 Q. Your report also discusses the  
11 International Fire Code, correct?

12 A. (Witness nods head affirmatively.)

13 Q. And it discusses Section 104, I believe.  
14 The International Fire Codes is another  
15 set of codes that deals with flammable gases. I  
16 believe Chapter 58 deals with flammable gases,  
17 correct?

18 A. Yes.

19 Q. And that chapter would be applicable to  
20 the Sterigenics facility?

21 A. Correct.

22 Q. And just like with the NFPA, there are  
23 certain provisions under the IFC that specifically  
24 state they apply retroactively, correct?

25 A. Say that again --



1 Q. Yes.

2 A. -- please.

3 Q. We discussed previously that the NFPA has  
4 certain requirements that specifically state they are  
5 to be applied retroactively, correct?

6 A. (Witness nods head affirmatively.)

7 Q. The IFC also has specific requirements  
8 that state they should be applied retroactively,  
9 correct?

10 A. Yes.

11 Q. But nothing in IFC 58, Chapter 58 states  
12 that the requirements of that code should be applied  
13 retroactively, correct?

14 A. Correct.

15 Q. And the same is true in IFC 50. That  
16 deals with hazardous materials, correct?

17 A. Correct.

18 Q. So if ethylene oxide presented a distinct  
19 hazard to life, the IFC Council would have made those  
20 provisions apply retroactively, correct?

21 A. Again, I would -- That's based on them  
22 becoming aware of those kinds of hazards, so it --

23 I would say that they haven't done those  
24 kind of things, because they're not aware of those  
25 hazards; and until they are, they're not making --

1 taking those actions.

2 Q. What do you mean when you say they're not  
3 aware of those kinds of hazards?

4 What hazards?

5 A. The -- The hazards that are associated  
6 with the material that exhibits the characteristics  
7 of something like an ethylene oxide, that it is  
8 flammable, that it is -- it is explosible to -- up to  
9 the point of even being detonatable, and that it is a  
10 health hazard. It's toxic.

11 So it has a series of hazard associated  
12 with it at very, very small -- in very, very small  
13 quantities; and those kinds of materials may warrant  
14 additional attention.

15 Q. When you say that they were not aware of  
16 those kinds of hazards, who is they?

17 A. Like the NFPA process, it is the committee  
18 that writes the fire code, so it's the Fire Code  
19 Committee.

20 Q. It's the committee that writes the  
21 International Fire Code?

22 A. Yes.

23 Q. And that's the ICC?

24 A. Well, ICC is the -- ICC is like NFPA.  
25 They are the organization that establishes the

1 standards, development, procedures, and processes;  
2 and then within them, they have committees that write  
3 their documents, so they have a fire code committee.  
4 They have a building code committee, like NFPA has  
5 committees for each of its numbered documents.

6 Q. Okay.

7 A. So that's the parallel that I can offer  
8 there.

9 Q. And you said that they weren't aware of  
10 certain kinds of hazards associated with ethylene  
11 oxide, which is flammable in small amounts, correct?

12 A. Yes.

13 Q. Do you know when --

14 Well, let's take the NFPA since you're  
15 experienced in the NFPA and, obviously, have worked  
16 there for a long time.

17 When did the NFPA become aware that  
18 ethylene oxide was a flammable gas?

19 A. Well, NFPA wouldn't have to. If I used  
20 ethylene oxide in the '40s or '50s -- And I don't  
21 know the history of ethylene oxide, but it's a -- a  
22 material that's been around for a long time. It's  
23 used to make things like ethylene glycol and stuff  
24 like that, which is an antifreeze and so on.

25 So any time I would have been using

1 ethylene oxide as part -- independent of  
2 sterilization or -- or things like that, in whatever  
3 context, its hazards are its hazards, because it's  
4 inherent in its chemical makeup; and its chemical  
5 makeup is such that it has certain characteristics.

6 And some of those characteristics are that  
7 it exhibits hazardous outcomes, in that it is easily  
8 ignitable, because it has a flash point that is low;  
9 and, therefore, it is readily giving off vapors. Its  
10 boiling point is close to room temperature, so as a  
11 liquid, it immediately goes to a gas. Gases are what  
12 burns, not liquids, so you have to have those vapors  
13 concentrate.

14 Its -- Its flammable range is wide. It's  
15 2 percent or 2.6 percent to a hundred, so it  
16 basically means I only need 2 percent of the air in  
17 this room to be ethylene oxide in order to achieve a  
18 mixture that is capable of being ignited if an  
19 ignition source appears.

20 And in combustion reactions, it is  
21 potential that it is going to react in an explosible  
22 way and not just have simple combustion, but have  
23 energetic combustion; and it's also toxic, so it has  
24 in -- impacts that are associated with my inhalation  
25 of the material.

1           Those properties existed for however long  
2 ethylene oxide has been around, so it has nothing to  
3 do with whether NFPA or ICC would have determined  
4 that it was. It is.

5           So however I would have gotten that  
6 property information, I would have under -- if I was  
7 then looking at using it in a way, I would have  
8 understood that it -- use comes with these kinds of  
9 concerns if I use it incorrectly.

10          Q.     Okay. That -- That wasn't my question.  
11                 You're an expert in hazardous material  
12 classifications, correct?

13          A.     (Witness nods head affirmatively.)

14          Q.     Okay. When were people --

15                 THE COURT REPORTER: Now I'm sorry.

16                 THE WITNESS: I'm sorry.

17                 MR. GRANTHAM: Yeah. I'm sorry.

18                 THE WITNESS: Yes.

19                 MR. GRANTHAM: I'm sorry. Yeah.

20                 THE WITNESS: Yes.

21          Q.     (By Mr. Grantham) When were people  
22 generally aware that ethylene oxide was a flammable  
23 gas?

24          A.     I -- again, I -- it -- it --

25                 I couldn't tell you a specific date. I

1 would say it's been for a considerable amount of  
2 time --

3 Q. So for --

4 A. -- '20s, '30s, '40s, '50s.

5 Q. So in the 1920s or the 1930s, in that  
6 timeframe, people generally knew that ethylene oxide  
7 was a flammable hazard, correct?

8 A. As I said, in terms of making the material  
9 and its composition, they would have understood that  
10 it behaved that way. Yes. Whether it's 1920, I  
11 don't know.

12 Q. Don't need an exact date.

13 A. Okay. But --

14 Q. But --

15 A. -- something of that order.

16 Q. -- decades --

17 A. Yes.

18 Q. -- in the past?

19 A. Yes.

20 Q. When did people enact the International  
21 Fire Code, Chapters 50 and 58?

22 A. That would be in --

23 When did they go through that whole  
24 process?

25 Officially, the actual ICC version was

1 somewhere in the early 2000s. I think the first  
2 edition was 2003 of the I -- IFC and IBC after ICC  
3 formed in the late 90's, but there were precursor  
4 documents to those existing document --

5 The ones we refer to today, IFC and IBC,  
6 there were regional precursor documents that go back  
7 to the 1970s and 1980s, including the Uniform Fire  
8 Code and Article 80 of the Uniform Fire Code, which  
9 was the hazardous material stuff. That document knew  
10 that ethylene oxide was a flammable gas.

11 So certainly in 1980, I would be pretty  
12 certain that the Article 80 of the Uniform Fire Code  
13 knew that ethylene oxide was an unstable reactive and  
14 was a flammable gas and -- from a code standpoint.

15 Q. So when you said earlier -- And let me  
16 just get this straight.

17 You testified earlier that the ICC was  
18 unaware of the hazards associated with ethylene oxide  
19 when they enacted the provisions of the IFC; is that  
20 correct?

21 A. I -- When you say unaware of the hazards,  
22 I -- again, I don't -- they were unaware of any --

23 I guess that's what I said. That's not  
24 how I meant that.

25 Q. Okay. Please clarify what you meant.

1           A.     Again, from the standpoint of being  
2     justification for changing, which is what you were  
3     asking about at the time, there was nothing coming to  
4     them saying that the provisions that are in there at  
5     this threshold now need to be reexamined because  
6     they're not protective. That information wasn't --  
7     didn't come to their attention to make any changes  
8     about quantities, which I think is what you were  
9     asking about at the time.

10          Q.     And when you say that information, what  
11     information are you talking about?

12          A.     Anything that would -- would have  
13     suggested to them that a threshold of 10,000 pounds  
14     wasn't protective. I don't know what that could be,  
15     but it was -- they -- they --

16                 As you said and as the documents show,  
17     10,000 pounds has been in place; but nobody has  
18     suggested changing it.

19          Q.     Okay. But that information, whatever it  
20     is -- And you don't know what it is. Fine.

21                 But that information, the ICC knows that  
22     now, right?

23          A.     Knows what now?

24          Q.     The information that you suggested was  
25     necessary to create a limitation on ethylene oxide.



1 A. I don't understand what you just asked me.

2 Q. Let me back up. The -- the IFC has  
3 enacted -- excuse me --

4 The ICC has promulgated different versions  
5 of the IFC Chapter 50 within the past 20 years,  
6 correct?

7 A. Yes.

8 Q. And during that timeframe, the ICC was  
9 aware of the hazardous materials of ethylene oxide.  
10 You would agree, correct?

11 A. You mean the hazardous properties or  
12 characteristics?

13 Q. I do.

14 A. Yes.

15 Q. Correct.

16 And throughout that time period, the ICC  
17 has never enacted codes in IFC 50 or 58 that apply  
18 retroactively, as a general rule, to the use of  
19 ethylene oxide, correct?

20 A. Correct.

21 Q. So the ICC does not believe that the use  
22 of ethylene oxide constitutes a unique hazard to life  
23 in all situations, correct?

24 A. I don't know what the ICC believes or  
25 knows.

1 Q. If the ICC believed that ethylene oxide  
2 presented a unique hazard to life, then they would  
3 have applied those provisions -- excuse me -- they  
4 would have drafted those provisions to apply  
5 retroactively, wouldn't they?

6 A. That is a possibility of how they could  
7 proceed. That's correct.

8 Q. It's not just a possibility. You would  
9 expect they would draft those provisions to apply  
10 retroactively, correct?

11 A. Yes.

12 MR. GRANTHAM: Okay. We've been going a  
13 little bit over an hour. I think now would be a  
14 good time to take a break.

15 THE WITNESS: Okay.

16 MR. GRANTHAM: Okay?

17 THE WITNESS: Yep.

18 MR. GRANTHAM: All right. We can go off  
19 the record.

20 THE VIDEOGRAPHER: Off record at 11:10.

21 (Recess from 11:10 a.m. to 11:26 a.m.)

22 THE VIDEOGRAPHER: All right. Back on the  
23 record at 11:26.

24 Q. (By Mr. Grantham) Mr. Colonna, before the  
25 break, we discussed how a -- a sterilization facility

1 that existed before 1995 may have been required to  
2 obtain a permit to use more than 10,000 pounds of  
3 ethylene oxide; is that correct?

4 A. I believe so. Yes.

5 Q. Can you point me to any provision in the  
6 code that requires a sterilization facility to obtain  
7 a permit to use more than 10,000 pounds of ethylene  
8 oxide?

9 A. No -- I -- My reason for that answer  
10 would be that it would be consistent with the exempt  
11 amount concept that said that you -- when you used an  
12 unstable reactive, which ethylene oxide has those  
13 characteristics, that you would have at the -- the  
14 exempt amount that I identified in one of those  
15 tables for ethylene -- or for unstable reactives, not  
16 specifically ethylene oxide, but unstable reactives  
17 was a zero amount.

18 So that would have meant that any amount  
19 of ethylene oxide would have required a permit to use  
20 it in -- store, use, or handle it in any -- in any  
21 quantity.

22 Q. But you're unaware of a specific code  
23 provision that requires a permit for a sterilization  
24 facility to use more than 10,000 pounds of ethylene  
25 oxide --

1 A. I --

2 Q. -- right?

3 A. -- am not aware of anything. That's  
4 correct.

5 Q. I believe you're aware that Sterigenics  
6 submitted a building permit application to Cobb  
7 County in August of 2019.

8 A. Yes. I am.

9 Q. Do you know what that building permit was  
10 for?

11 A. I believe that was for the modifications  
12 to the emissions control system.

13 Q. Do you know what those modifications to  
14 the emission control system were?

15 A. I -- I believe they were described as  
16 upgrades. I don't know specifically.

17 Q. Upgrades. But you don't know what  
18 specific measures were installed to upgrade the  
19 emission control system?

20 A. No.

21 Q. Do you know what a negative pressure  
22 system is?

23 A. I -- In general, yes.

24 Q. But you don't know specifically what a  
25 negative pressure system does or how it moves air, do

1 you?

2 A. Well, negative pressure usually means that  
3 it is pulling a vacuum; and when you're controlling  
4 contaminants that are flammable, but certainly toxic,  
5 it is common from a ventilation control perspective  
6 in terms of industrial hygiene and things like that  
7 to use capture and collection, so negative pressure  
8 methods, as opposed to positive pressure.

9 Q. Okay. So just to clarify, a negative  
10 pressure system then is a common ventilation control  
11 system?

12 A. Yes.

13 Q. And you've heard of it and know generally  
14 what it means?

15 A. Yes.

16 Q. What about a dry bed? Do you know what a  
17 dry bed is?

18 A. Yes. It's a -- It's a scrubber, and it  
19 pulls air through it, and it -- The contaminants  
20 will be absorbed in that, and then you can capture  
21 those and -- and not have that emitted into a -- an  
22 area.

23 Q. Do you know if scrubbers, the word you  
24 just used, do you know if the facility at  
25 Sterigenics' facility had scrubbers in place before

1 August of 2019?

2 A. I believe so. Based on what I've read, I  
3 believe they had scrubbers in there before the --  
4 that permit request. Yes.

5 Q. And the emissions control modification  
6 work added some dry beds or scrubbers, as you call  
7 them?

8 A. I believe so. Yes.

9 Q. Have you done any analyses of the  
10 emissions control upgrades that Sterigenics actually  
11 installed under the August 2019 permit?

12 A. I have not.

13 Q. So you do not have any specific knowledge  
14 of how that system works, correct?

15 A. None. No.

16 Q. Have you done any sort of analyses to  
17 determine whether the emission control upgrades  
18 installed under that building permit increased the  
19 risk of a fire incident at the facility?

20 A. I have not.

21 Q. So you don't have an opinion here today  
22 whether the installation of those emissions control  
23 upgrades increased the risk of a fire incident at the  
24 Sterigenics facility?

25 A. Since I haven't visited the facility and

1 haven't studied any of the plans or documentation or  
2 processes, I'm unable to make any determination on  
3 that. Yes.

4 Q. And you haven't studied the emissions  
5 control upgrades to know whether the ethylene oxide  
6 that is in the air of that system ever reaches a  
7 flammable concentration, correct?

8 A. Ask that again. I want to get  
9 specifically what your point of reference is.

10 Q. You haven't studied the negative pressure  
11 system installed at the facility to know whether the  
12 level of ethylene oxide passing through that system  
13 reaches a flammable concentration, correct?

14 A. That is correct. I have not.

15 Q. Going back to some of your testimony  
16 earlier today, you said that risk has two prongs to  
17 it; is that correct?

18 A. Yes. That is a generally accepted and  
19 most commonly practiced definition for risk is it has  
20 two components. Yes, sir.

21 Q. And when you say generally accepted and  
22 commonly practiced, by who?

23 A. Process safety personnel. Risk  
24 management. Any of those areas that are involved in  
25 terms of using risk-based methodologies. You start

1 with understanding what risk is.

2 And so the hazard is an ability to cause  
3 harm, and then what risk is doing is making  
4 determinations on how you manage that hazard, and  
5 risk requires those two elements. One is you have  
6 some understanding of the frequency, likelihood,  
7 probability that the -- the hazard is going to  
8 manifest itself, and then the second component is the  
9 consequence or severity of that hazard when it does  
10 manifest itself.

11 And what risk management does is after  
12 you've quantified those two elements, probability and  
13 severity, you're able to make determinations on which  
14 way you're going to go in terms of investing in risk  
15 management.

16 Q. Okay. So there's a couple things I want  
17 to talk about there. The first is that I believe  
18 you're making a distinction between the presence of a  
19 hazard and the risk that are associated with that  
20 hazard, correct?

21 A. That is correct.

22 Q. Okay. And you've also said that there are  
23 these publicly accepted or generally accepted methods  
24 for assessing risk, correct?

25 A. Correct.



1 Q. And that would include a -- a fire hazard  
2 assessment of some sort, right?

3 A. A fire hazard -- hazard assessment. Yes.

4 Q. And in conducting an assessment to  
5 determine the risk of a particular fire incident, you  
6 should assess the probability of that incident  
7 occurring, correct?

8 A. If you're doing risk, then yes. You --  
9 Probability should be one of the features. Yes.

10 Q. And the other feature or another key  
11 feature should be assessing potential consequences of  
12 a risk?

13 A. Correct.

14 Q. And in the case of Sterigenics' facility,  
15 that would include assessing the potential  
16 consequences of a fire incident, correct?

17 A. Fire. Explosion. Toxic releases.

18 Again, when you go back to the  
19 characteristics of ethylene oxide, you would want to  
20 look at all those characteristics that are inherent  
21 with that -- its chemical nature.

22 Q. You haven't performed any risk assessment  
23 in this case about the chances of a fire incident --

24 A. I have not.

25 Q. -- in the Sterigenics facility, correct?

1 A. Sorry.

2 I have not.

3 Q. And you also haven't performed any  
4 assessment of the risk associated with an explosion  
5 at the Sterigenics facility, correct?

6 A. I have not.

7 Q. And you also have not done any sort of  
8 analysis or assessment of risk associated with the  
9 release of hazardous material -- of hazardous  
10 chemicals into the atmosphere at the Sterigenics  
11 facility, correct?

12 A. That is correct.

13 Q. Are you aware of any fire risk assessment  
14 regarding the Sterigenics facility performed by the  
15 AHJ in the summer or fall of 2019?

16 A. I -- I guess that's the title of the  
17 Q-Dot report is something to do with fire -- fire  
18 hazard analysis or -- or fire -- a fire --

19 I've forgotten the name of that Q-Dot  
20 report, but it's something like that.

21 So if that's what you're asking about,  
22 then that is --

23 Q. Well, that wasn't my question.

24 A. Okay. Then --

25 Q. Are you aware of any risk assessment

1 regarding the Sterigenics facility performed by the  
2 Cobb County Fire Marshal's Office in the summer or  
3 fall of 2019?

4 A. I am not.

5 Q. Okay. And are you aware of any risk  
6 assessment regarding the Sterigenics facility  
7 performed by the a -- excuse me -- by the Cobb  
8 Building Official in the summer or fall of 2019?

9 A. I am not.

10 Q. And you're not here today to give an  
11 opinion that any unsafe condition actually exists at  
12 the facility, correct?

13 A. I am not.

14 Q. Earlier today, you mentioned, I believe,  
15 the 2015 SSOE report --

16 A. Yes.

17 Q. -- is that correct?

18 And you reviewed that report in connection  
19 with your -- your work on this case?

20 A. I read that document. Yes.

21 Q. Yeah. Are you familiar with the author of  
22 that report?

23 A. First time I ever heard his name was  
24 reading his name on the signed report.

25 Q. Are you familiar with the SSOE firm?

1           A.     I am not.

2           Q.     One of your report's opinions in this case  
3     is that the Cobb County officials -- I use the term  
4     "the AHJ" -- was permitted to apply certain code  
5     provisions retroactively to the Sterigenics facility  
6     because it determined there was an unacceptable  
7     degree of risk; is that correct?

8           A.     Yes.

9           Q.     And we just discussed that you're not  
10    aware of any risk assessment performed by either the  
11    Fire Marshal's Office or the Cobb County Building  
12    Official in the summer or fall of 2019, correct?

13          A.     Correct.

14          Q.     So what is your basis for the opinion that  
15    the Cobb County Fire Marshal or Building Official  
16    determined there was an unacceptable degree of risk  
17    at the facility?

18          A.     The series of documents, whether -- That  
19    includes the various permits where the certificate of  
20    occupancy goes back and forth between classifications  
21    of -- of the facility; and as we talked about  
22    earlier, the -- my opinion is that that facility  
23    using ethylene oxide for sterilization in the  
24    quantities that it's using it should have always been  
25    an H Occupancy; and, therefore, should have come with

1       protections that are consistent with that.

2               That's probably the starting place for my  
3       opinion being that an AHJ might use that lack of  
4       consistency in terms of that documentation around a  
5       property that has those kinds of -- has that  
6       potential hazard there to raise questions and ask  
7       questions about that from the standpoint of  
8       considering applying codes and standards requirements  
9       retroactively.

10       Q.     Is it your testimony that a series of  
11       certificate of occupancies with conflicting  
12       information constitutes an unacceptable degree of  
13       risk?

14       A.     I think it questions whether or not the  
15       property is -- the facility has been -- is fully  
16       understood in terms of what activities are going on;  
17       and, therefore, until those are looked at, it enables  
18       an AHJ to raise questions.

19       Q.     But my -- my question was different. It  
20       was that what is the basis for your opinion that the  
21       AHJ determined there was an unacceptable degree of  
22       risk at the facility?

23               MR. CHOY: Object to form.

24       Q.     (By Mr. Grantham) And the basis of that  
25       cannot be conflicting certificates of occupancy,

1 right?

2 MR. CHOY: Object to form.

3 THE WITNESS: I have experienced  
4 situations where AHJs have made decisions about  
5 the requirements in codes and standards for any  
6 number of reasons; and not being an AHJ, what I  
7 usually found myself in the middle of was the  
8 stakeholder asking NFPA for an understanding of  
9 what staff thought the code requirement said,  
10 while the AHJs were saying but they thought it  
11 meant something else; and in my experience,  
12 usually the AHJ trumped in those cases at least  
13 to have further discussions around those issues.

14 And that's what I've observed in reading  
15 the documentation that has been provided to me  
16 here, is that the inconsistent way in which  
17 the -- what -- what, to me, should be the  
18 correct occupancy as an H Occupancy and any of  
19 the provisions that come with that through  
20 either the Fire Code or through the fact that in  
21 Georgia, in addition, they also brought in  
22 either 560 or 55, that all of those features  
23 should have been looked at; and the question  
24 would be were they all looked at because of the  
25 inconsistency with -- with the -- the occupancy

1 classification in those COs.

2 Q. (By Mr. Grantham) I think I've asked this  
3 before.

4 But do you know who issues the  
5 certificates of occupancy to the Sterigenics  
6 facility?

7 A. I -- The CO., I think, because that's a  
8 occupant. That would come from the Building  
9 Official.

10 Q. All right. And -- And there is nothing  
11 in the certificates of occupancy that you've reviewed  
12 in this case that identified a hazard or dangerous  
13 situation at the facility, correct?

14 A. Not that I read. No.

15 Q. Is there any documentation you've reviewed  
16 in connection with your work in this case where a  
17 specific dangerous situation at the facility was  
18 identified?

19 A. Not that I've read. No.

20 Q. And it's your opinion -- Scratch that.

21 It's not your opinion that an unacceptable  
22 degree of risk existed at facility in August of 2019,  
23 correct?

24 A. Ask that again. I -- The double  
25 negatives got me there maybe.

1           Q.     You're not giving an opinion in this case  
2     that an unacceptable degree of risk existed at the  
3     facility in August 2019, correct?  You don't --

4           A.     That's correct.

5           Q.     Your opinion is that the AHJ determined an  
6     unacceptable degree of risk existed at the facility  
7     in August '19, correct?

8           A.     That's what I've read.  Yes.

9           Q.     Well, it's not what you've read.  I mean,  
10    you submitted an expert report in this case, correct?

11          A.     Yes.

12          Q.     And in that report, you list the  
13    determinations that you made, right?

14          A.     Yep.

15          Q.     And one of those determinations is that  
16    the AHJ was permitted to retroactively apply the  
17    codes to the Sterigenic (sic) facility because the  
18    AHJ determined that there was an unacceptable degree  
19    of risk at the facility, correct?

20          A.     Yes.

21          Q.     And you can't point to any documentation  
22    in this case that you've reviewed where the AHJ  
23    identified a specific unsafe situation at the  
24    facility, correct?

25          A.     Correct.



1           Q.       So is your opinion that the AHJ made that  
2       determination based on conversations with the  
3       defendants?

4           MR. CHOY:   Object to form.

5           THE WITNESS:   Ask that again.   I'm --

6       I'm --

7           Q.       (By Mr. Grantham)   Is your opinion in this  
8       case that the AHJ determined that an unacceptable  
9       degree of risk existed, is that opinion based on  
10      conversations you've had with the Defendants?

11          A.       No.   I -- it --

12                 So is my opinion based on my talking with  
13      the defendants?   That's what you're asking me?

14          Q.       That's not my exact question.   It's how do  
15      you know that the AHJ determined there was an  
16      unacceptable degree of risk?

17          A.       That's my assumption based on what I've  
18      read where the questions are about retroactively --  
19      retroactive application of code requirements.

20                 And, again, in talking with the Defendants  
21      through their -- their -- the attorneys, one of the  
22      questions they asked me to engage in was specifically  
23      under what circumstances are you permitted to apply  
24      codes and standards retroactively?

25                 And one of those provisions, as we already

1     went through before the break, was that there's a  
2     determination of an unacceptable degree of risk; and  
3     a similar language exists in the IBC and IFC, so  
4     whether it's the NFPA documents with which I'm more  
5     familiar or the IBC, IFC, that same type of provision  
6     exists; and so my conclusion is that they are  
7     permitted to apply retroactively, if they have made  
8     that determination.

9           Q.     Okay. That's very different than what's  
10    in your report. Your -- Your report states that  
11    they did determine there was an unacceptable degree  
12    of risk, but here you're stating that it's an  
13    assumption in your report that they determined there  
14    was an unacceptable degree of risk, correct?

15          A.     Yes.

16          Q.     So you do not have an opinion as to  
17    whether the AHJ determined in August of 2019 or any  
18    time thereafter that an unacceptable degree of risk  
19    existed at the facility?

20          A.     I have --

21                 MR. CHOY: Object to form.

22                 THE WITNESS: I have found nothing that  
23    shows me what they use as that basis.

24          Q.     (By Mr. Grantham) One thing your report  
25    states on Page 35 is that AHJs do not always become

1 aware of changes that can occur within a high hazard  
2 occupancy; is that correct?

3 A. Yes.

4 Q. Is it your opinion that there was any  
5 change that occurred within the Sterigenics facility  
6 in terms of Sterigenics' use of ethylene oxide that  
7 Defendants were not aware about?

8 A. I don't know what they were aware of. I  
9 know I've seen -- and I don't know the -- I don't  
10 know the timing or sequence; but I believe there  
11 was -- Whether it was in conjunction with the SSOE  
12 report or even -- or the development of the Q-Dot  
13 reports -- again, I don't remember the timing --  
14 where there was correspondence -- I believe it was  
15 from Mr. Massey -- where the quantity of EO had been  
16 increased by 30 percent. I don't remember what -- it  
17 was 30 percent above what, but there was -- There  
18 was correspondence where I believe the EO was going  
19 to be or had been increased or was going to be.

20 So that would be an example where I'm not  
21 sure whether -- when that occurred and whether the  
22 typical scenario for an AHJ would be that they would  
23 have gotten that information communicated by a  
24 facility that stores, handles, or uses hazardous  
25 materials.

1           My experience with other investigations  
2     that I've been privy to through like the Chemical  
3     Safety Board, the U.S. Chemical Safety Board, there  
4     was an incident north of Boston in -- I think it was  
5     2009 or '11 or something like that -- in Danvers. It  
6     involved an explosion at a facility.

7           And what was determined there was that  
8     that facility was using materials that were not in  
9     the records in the local fire department; and they  
10    were using them in quantities and in a manner that  
11    wasn't consistent, so things like Tier 2 reports and  
12    other exchange of information between owner/operators  
13    of facilities that store, handle, and use hazardous  
14    materials, that link between the two or -- the two  
15    entities, the enforcing official and the operating  
16    company, were not being maintained.

17          So that is the nature of my comment there  
18    is that I have observed in more than one instance  
19    that AHJs are not necessarily kept up to date on  
20    that. They don't always have the staff perhaps to do  
21    the inspections of those facilities to get updated  
22    things, and that information doesn't come freely.

23          So if that is the case, then that's a  
24    situation where an AHJ could decide that, you know,  
25    if they learn that things have changed, they could

1 become concerned or become interested in what else is  
2 going on, so that's the background to that kind of a  
3 comment.

4 MR. GRANTHAM: Okay. I object to the  
5 nonresponsiveness of the -- the answer.

6 Q. (By Mr. Grantham) One thing you mention  
7 is that you may be -- you're not sure but -- but you  
8 think that the AHJ may have become aware of an  
9 increased quantity of EO used at the facility at some  
10 unknown time, right?

11 A. Yes.

12 Q. We discussed earlier that you're not aware  
13 of any time that the facility has used less than one  
14 drum of ethylene oxide, right?

15 A. Correct.

16 Q. And then that's over 400 pounds or  
17 approximately 400 pounds?

18 A. Correct.

19 Q. So even if the facility did increase  
20 ethylene oxide usage at some point, it wouldn't have  
21 changed the occupancy classification of the building  
22 under current codes, right?

23 A. Correct.

24 Q. It would still be an H Occupancy?

25 A. Correct.

1 Q. You also mentioned the timing of -- And I  
2 believe you threw in the SSOE report. Do you know  
3 what year the SSOE report was dated?

4 A. I think the -- There were two versions.  
5 I think the second one was September 15th of 20 -- or  
6 September something of 2015.

7 Q. And in that report, it states that  
8 Sterigenics' facility stores up to 40 drums of  
9 ethylene oxide; is that correct?

10 A. Yes.

11 Q. And that is equivalent of approximately  
12 16,000 pounds, correct?

13 A. Correct.

14 Q. And that report was given to the Cobb  
15 County Fire Marshal's Office, correct?

16 A. I believe so. Yes.

17 Q. And, in fact, there's a stamp on that  
18 report that says reviewed by the Cobb County Fire  
19 Marshal's Office, correct?

20 A. I -- There are stamps on there. I  
21 thought they were the two authors of it. I don't --  
22 I don't remember whether there was.

23 Q. Well, I'll show you this. This has  
24 previously been marked as Plaintiff's Exhibit 47.

25 A. Oh, okay.

1 Q. And if you look on the first page of that  
2 report, Mr. Colonna --

3 And, again, you've reviewed this report in  
4 connection with your report?

5 A. I have. Yes.

6 Q. Okay. And if you look on the first page,  
7 it has a stamp on there that says "REVIEWED BY THE  
8 Cobb County Fire Marshall's Office," correct?

9 A. Correct.

10 Q. Okay. So as of 2015, September of 2015,  
11 the Cobb County Fire Marshal's Office was aware that  
12 the Sterigenics facility stored up to 16,000 pounds  
13 of ethylene oxide at the facility, correct?

14 A. Correct.

15 Q. Do you know how much ethylene oxide is  
16 currently stored at the facility?

17 A. I -- I saw -- I saw a value from -- I  
18 think it was in the Q-Dot report -- might have been  
19 one or two other sources -- that came out to be 28  
20 55-gallon drums, which would be 11,200 pounds.

21 Q. So significantly less than 16,000 pounds.

22 A. Yes.

23 Q. You'd agree?

24 So from 2015 to the present, there hasn't  
25 been a change in the use of ethylene oxide that would

1     constitute a new risk associated with the facility,  
2     correct?

3           A.     If that's the only information that I  
4     have, then I -- the answer is yes.

5           Q.     And it is the only information --

6           A.     Okay.

7           Q.     -- you have, right?

8           A.     Yep. Yes.

9           Q.     You also mention that -- in your report  
10    that NFPA 400 requires the completion of a -- a  
11    hazardous materials inventory statement, right?

12          A.     Yes.

13          Q.     And the AHJ would want that kind of  
14    inventory statement to know what hazardous materials  
15    are present at a facility, correct?

16          A.     Yes.

17          Q.     And they would want that to know the  
18    quantities of those hazardous materials present at  
19    the facility, correct?

20          A.     Yes.

21          Q.     And they would want that to know where  
22    within the facility those hazardous materials are  
23    stored, correct?

24          A.     Yes.

25          Q.     Do you know whether a hazard management



1 report was prepared and given to Q-Dot as part of  
2 their analysis in this case?

3 A. I thought that was one of those open items  
4 that -- And, again, I may be confusing either the  
5 December 2019 versus the -- the March 2020 reports,  
6 whether that was reconciled; but I --

7 In -- In one of them, I believe that was  
8 an open item by the authors of the report, that that  
9 was to be completed by Sterigenics and would be an  
10 element of the conclusions and findings of -- of the  
11 Q-Dot report.

12 So I don't know whether one was actually  
13 completed and delivered.

14 (Plaintiff's Exhibit 373 was marked for  
15 identification.)

16 Q. (By Mr. Grantham) Okay. I'm handing you  
17 what's being marked as Plaintiff's Exhibit 373.

18 Have you seen this document before?

19 A. Yes. I have.

20 Q. And is that document your engagement  
21 letter in this case?

22 A. It is Page 1 of the engagement letter.  
23 Yes.

24 Q. There's a back to it, I believe or -- Or  
25 is there not?

1           A.     No.  There isn't.  I think that's the only  
2 piece.

3           Q.     There's more to it.  Okay.  Well,  
4 that's -- that's my fault.

5           A.     I can provide the additional page --

6           Q.     No, no.  That's okay.

7           A.     -- if I may.

8           Q.     Have you --  It's your only engagement  
9 letter in this case --

10          A.     Yes.

11          Q.     -- correct?

12                 Yeah.  And how were you selected for this  
13 project; do you know?

14          A.     I believe the initial conversation  
15 occurred in the fall of 2020 shortly after -- well, a  
16 couple of months after my retirement from NFPA.

17                 A colleague of mine, a former engineering  
18 staff person at NFPA that -- with whom I had worked  
19 for probably over 30 years, reached out to me and  
20 asked if I would be -- if I was entertaining project  
21 opportunities in -- in -- as -- in my retirement  
22 and -- and --  And the contact ultimately led me to a  
23 conversation with Mr. Dawe.

24                 And, also, and I believe you and I talked  
25 in October, November of 2020, and then --

1 Q. And for the record, who are you --

2 A. I'm sorry. Mr. Dawe and --

3 Q. You spoke with Mr. Dawe in October of  
4 2020?

5 A. I believe it was October.

6 And, also -- And I was directed that I --  
7 if I was inclined to have a conversation or perhaps  
8 be engaged in this, I was to talk to a David  
9 McCollum. I think it's McCollum, and he is an  
10 attorney with Mr. Choy's firm, and I didn't talk to  
11 him in the fall of 2020. The next contact was,  
12 again, with -- through Mr. McCollum either through  
13 e-mail or phone call, whichever proceeded in about  
14 April of 2021.

15 And that led to a conversation with Mr.  
16 Bentley and -- And that -- that followed with the  
17 letter of engagement.

18 Q. Did you know Mr. Dawe before this  
19 engagement?

20 A. We did. I'm not sure how many times that  
21 we would have encountered in his role; but, again, I  
22 did training in Georgia in the wake of the sugar  
23 refinery explosion in 2008 for the fire officials in  
24 the state, so it could have been there.

25 He's on a number of NFPA committees, and

1 so I could have encountered him at NFPA committees,  
2 or I could have encountered him at the NFPA  
3 conferences and things like that. So I don't  
4 remember explicitly when we would have met.

5 He also could have called me in his role  
6 as fire marshal asking questions to me about the  
7 standard -- codes and standards that I used, and I  
8 could have just been performing the technical  
9 advisory assistance that I would apply to -- or what  
10 I would provide to anyone.

11 So I don't remember exactly where we met  
12 and how -- for how long we've known each other but --

13 Q. What about Mr. Gobble? How long have you  
14 known Mr. Gobble?

15 A. Only since becoming engaged, from the time  
16 of this engagement letter, so our first conversations  
17 would have been only by video, Teams or Zoom  
18 meetings; and that probably would -- Our first one  
19 would have been, I think, Mayish maybe. I think  
20 that's when we first had our meeting coordinated  
21 through -- through Mr. Bentley's team.

22 (Plaintiff's Exhibit 374 was marked for  
23 identification.)

24 Q. (By Mr. Grantham) Okay. I'm going to  
25 hand you what's being marked as Plaintiff's Exhibit

1 374.

2 These are copies of the invoices that you  
3 have submitted for your work in this case; is that  
4 correct?

5 A. Yes, sir.

6 Q. And you submitted one on June 3rd, 2020,  
7 right?

8 A. You mean 2022, sir?

9 Q. Excuse me. 2022. Yes.

10 And that was for \$11,000 -- \$11,050, --

11 A. Yes.

12 Q. -- correct?

13 And that was for all of the work that you  
14 performed between the engagement start through  
15 December of 2021, it looks like. Is that correct?

16 A. Yes, sir.

17 Q. And that was a total of 110 hours or  
18 just --

19 A. Yes, sir.

20 Q. -- over.

21 And then the second invoice is July 20th,  
22 2022, correct?

23 A. Yes, sir.

24 Q. And that's for all your services from  
25 January 1st, 2022 through June 30th, 2022?

1 A. Yes, sir.

2 Q. For a total of \$3,450?

3 A. Yes, sir.

4 Q. So the total you've been paid on these --  
5 on this case, assuming my math is correct, is  
6 \$14,500; is that correct?

7 A. I've actually not been paid for any of it  
8 yet. It -- the -- the -- The billing is in and is  
9 being processed, so officially, I have not received  
10 any money yet.

11 Q. And that amount does not include this  
12 deposition, correct?

13 A. That's correct.

14 Q. It does not include any amount you would  
15 be paid to prepare for trial, correct?

16 A. Correct.

17 MR. GRANTHAM: Can we go off record for a  
18 second.

19 THE VIDEOGRAPHER: Off record at 12:03.

20 (Lunch recess from 12:03 p.m. to  
21 p.m.)

22 THE VIDEOGRAPHER: We are back on the  
23 record at 12:39.

24 Q. (By Mr. Grantham) Mr. Colonna, real  
25 quick, during the break, did you talk to counsel

1 about your testimony today?

2 A. No. I did not.

3 Q. You brought a couple file folders with you  
4 to the deposition today. I'd like to mark that as  
5 Plaintiff's Exhibit 375.

6 A. Both folders?

7 Q. Yeah. We can just do one for now.

8 A. Okay.

9 Q. Can we just walk through what you've  
10 brought.

11 A. Can I take that out of there?

12 Q. Yeah, yeah, yeah.

13 A. That's --

14 Q. Okay.

15 A. That's got nothing on it.

16 Q. Yep.

17 A. Okay. So what I brought was --

18 THE COURT REPORTER: If I could just put  
19 this on there --

20 THE WITNESS: Oh, sorry.

21 THE COURT REPORTER: -- first.

22 THE WITNESS: Yes.

23 THE COURT REPORTER: Or you put it on the  
24 front for us.

25 THE WITNESS: Yeah.

1 THE COURT REPORTER: There we go.

2 (Plaintiff's Exhibit 375 was marked for  
3 identification.)

4 THE WITNESS: Okay.

5 THE COURT REPORTER: Yeah.

6 THE WITNESS: So I just handwrote notes to  
7 myself as I was kind of reminding myself and  
8 going through.

9 You need -- You want to see those?

10 MR. CHOY: Yeah. Please let us.

11 Q. (By Mr. Grantham) These are notes that  
12 you prepared for today?

13 A. Yes. Anticipating perhaps what questions  
14 you might ask and stuff like that.

15 MR. GRANTHAM: You want to mark it?

16 MR. MASSEY: Well, I think it's already  
17 marked.

18 MR. GRANTHAM: Okay. Yeah.

19 Q. (By Mr. Grantham) Okay. Yes. Please  
20 continue.

21 A. That's the subpoena with Attachment A  
22 so --

23 Q. That we served on you?

24 A. That you served on. Yes. That's your  
25 signature, I believe.



1 Q. Yeah.

2 A. I think you were the one that -- Yeah.

3 And then just copy of my report, so that's  
4 that. That's what's in that folder.

5 And this folder was notes from --  
6 handwritten notes from one of the -- of my review. I  
7 think it was November of 2021. I think that's what  
8 this was for, and this was related to me preparing my  
9 report.

10 Q. And you produced some notes to us --

11 A. Yes.

12 Q. -- in response to --

13 A. Yeah.

14 Q. -- the subpoena, correct?

15 A. Yep. Yeah. I think --

16 Q. Are those notes included in what you  
17 produced to us?

18 A. I don't know whether these got copied in  
19 there or not. I'm not sure.

20 So this was a -- Early on, this was a  
21 timeline of all the documents that had been, I guess,  
22 obtained during discovery. That was provided to me  
23 by the Bentley law firm.

24 Q. And the Bentley law firm created that  
25 timeline?

1           A.     I believe so. I think this might have  
2 came from Jamie.

3           THE WITNESS: I'm not sure if this came  
4 from you or not. I'm not sure.

5           Document provided to me, which was on what  
6 should go in the Rule 26 report. That's, I  
7 think, off a website.

8           Q.     (By Mr. Grantham) Who provided that to  
9 you?

10          A.     I think they gave me the link that I  
11 should go get, so I printed it out, so I don't think  
12 they actually gave it to me. I think I had to --  
13 I --

14          They gave me a link and said go to this  
15 link and get the information on what the contents for  
16 a Rule 26 report should be.

17          This is the engagement letter. As I said,  
18 there were more pages than what I included; and the  
19 envelope and my confidentiality order, signature,  
20 this was all part of that. This was what came in  
21 that mailing to me.

22          Q.     Got it.

23          A.     This is one of the items that I referenced  
24 in terms of getting hazardous materials information,  
25 so this is from the HMIX -- or HMEx website that

1 gives kind of like safety data sheet, only this is  
2 specifically their -- the --

3 As I explain in my report, the purpose of  
4 the HMEEx is to assist code officials with hazardous  
5 classification information, so this is on ethylene  
6 oxide which, you know, is also the same as oxirane;  
7 so that's what that is.

8 Q. May I see that.

9 A. Yes.

10 Q. You can continue.

11 A. Yeah. The next items are the '95, '90 --  
12 2002, and -- and 2007 editions of NFPA 560.

13 Q. Yep.

14 A. So those are my copies, 'cause I got -- I  
15 bought those from NFPA.

16 One of the questions that came up during  
17 some of our discussions with the -- the team for the  
18 Defendants was about -- They were asking me what  
19 layer protection analysis was, because it had been  
20 referenced in some of the materials that a LOPA,  
21 layer protection analysis, had been performed for the  
22 facility so --

23 Q. Have you seen the LOPA analysis that was  
24 prepared in connection with this --

25 A. I had.

1 Q. -- facility?

2 A. And that was me going back and digging  
3 things up, so I could better explain it. I was  
4 familiar with it. I'm not an expert in doing those  
5 kinds of things, but I was familiar with it from  
6 various applications and then taking a seminar or  
7 something like that on it at one point in time.

8 This was just so I could explain it to the  
9 Defendants' team.

10 Q. And what's the name of that document? I'm  
11 sorry.

12 A. This document is from SIS-TECH. It's just  
13 a -- a -- web-based stuff that I just pulled up in  
14 terms of outlining kind of what the purposes of LOPA  
15 are and what you might go through in terms of steps  
16 and how you document things and so on.

17 Q. Okay.

18 A. This is a -- a LOPA tutorial. Again, a  
19 similar document that I just pulled off a website, so  
20 it's similar information about LOPA.

21 The ethylene oxide safety data sheet.

22 Q. And that's from Airgas?

23 A. Yes.

24 This is an article about -- that was in a  
25 publication in 2013. This was a -- This was a

1 published article on the investigation. The --

2 This article goes in and does a case study  
3 on the Ontario, California explosion that the  
4 Chemical Safety Board investigated at the Sterigenics  
5 facility in California, so that's what that -- that  
6 paper is.

7 Q. Okay.

8 A. This is discussion from -- This is an  
9 e-mail from Mr. Massey, to Mr. Munger and several  
10 others about -- and one of this --

11 One of the things listed for me early on  
12 in my time trying to go through all this was it gave  
13 me the quantities that were -- that -- specified in  
14 terms of ethylene glycol, ethylene oxide, propylene  
15 oxide, sulfuric acid.

16 Q. What's the date of that e-mail?

17 A. That date is October 30th, 2019, from Mr.  
18 Massey, to Mr. Munger and Mr. Walker, with a number  
19 of folks copied.

20 Q. Okay.

21 A. If you want --

22 Q. No.

23 A. I mean, it's going to be in here. Yeah.

24 Q. Yeah.

25 A. This is one of the documents you asked

1 for, is the FM global property loss prevention data  
2 sheet on ethylene oxide.

3 Q. Yeah.

4 A. This was actually taken out of  
5 Warnick's -- Miss Warnick's deposition. It was  
6 Exhibit 7 from her deposition, and this was a note  
7 from her to the partners about the status of things,  
8 and so there was information in this document that  
9 helped me, again, tie together things that I was  
10 either chasing in multiple sources and stuff like  
11 that.

12 Q. Yeah. Could we see that.

13 A. Yes, sir.

14 Q. And you reviewed this document in  
15 preparation of your report?

16 A. Yes.

17 And then this is the SSOE Hazard  
18 Evaluation Report. I got it out of Exhibit 48 from  
19 Miss Warnick's deposition, the one you showed me here  
20 is I think Exhibit 47, so mine doesn't have the Cobb  
21 County stamp on it.

22 So that's why, when you asked that, I  
23 remembered this one only for these seals  
24 (indicating). I didn't remember the one but --

25 Q. Got it.

1           A.     Okay. And then these are pages from  
2     the -- one of the other references that I had  
3     mentioned.

4                 These are pages from one of the other  
5     documents I mentioned in my report, "The Fire  
6     Protection Guide to Hazardous Materials." It's --  
7     The printout's not very well, 'cause the book is hard  
8     to copy; but it's printouts from the ethylene oxide  
9     page, the propylene oxide page, and the sulfuric acid  
10    page, so as just references for further documenting  
11    kind of the hazardous characteristics of those  
12    materials.

13          Q.     Did you bring any other materials with you  
14    today?

15          A.     No. Did not.  
16                 Are you finished with those things?

17          Q.     I am.

18          A.     Okay.

19          Q.     There's no other folder, right?  
20                 Those are --

21          A.     No.

22          Q.     -- the two --

23          A.     They're just the two folders.

24          Q.     -- file folders?

25          A.     That's it.

1 Q. Okay.

2 A. Yeah.

3 Q. Yeah.

4 MR. GRANTHAM: Okay. I'm going to  
5 introduce an exhibit into the record.

6 Which number is it? Sorry. 376, I  
7 believe.

8 (Plaintiff's Exhibit 376 was marked for  
9 identification.)

10 THE COURT REPORTER: Okay.

11 THE WITNESS: Yes. It would be 376.

12 Q. (By Mr. Grantham) This is Plaintiff's  
13 Exhibit 376. And these are your notes that you  
14 produced to us in response to the subpoena, correct?

15 A. Yes, sir.

16 Q. And those notes were taken in connection  
17 with certain telephone calls you had with Defendants  
18 and their counsel?

19 A. Yes. Those are starting back in April of  
20 2021 through whatever I said.

21 Q. Okay.

22 A. The last one we had was -- I forget the  
23 date, but it was sometime into this year.

24 MR. GRANTHAM: No further questions.

25 THE WITNESS: Okay.



1 MR. CHOY: Okay. No questions. We'll  
2 reserve.

3 THE VIDEOGRAPHER: Off the record at  
4 12:50.

5 MR. GRANTHAM: The usual.

6 THE COURT REPORTER: Sun, your usual?

7 MR. CHOY: Yes.

8 (Whereupon, the deposition was concluded  
9 at 12:50 p.m.)

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C E R T I F I C A T E

STATE OF GEORGIA:

COUNTY OF FULTON:

I hereby certify the foregoing transcript was taken down, as stated in the caption, and the questions and answers thereto were reduced to typewriting under my direction; that the foregoing pages 1 through 100 represent a true, complete, and correct transcript of the evidence given upon said hearing, and I further certify that I am not of kin or counsel to the parties in the case; am not in the regular employ of counsel for any of said parties; nor am I in anywise interested in the result of said case.

This, the 8th day of August, 2022.



S. JULIE FRIEDMAN, CCR-B-1476

LEGAL SOLUTIONS

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1 TO: Sun S. Choy, Esq., schoy@fmglaw.com  
2 Signature of Deponent Guy Robert Colonna  
3 Date Errata due back at our offices: 30 Days  
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23 \_\_\_\_\_, \_\_\_\_\_.  
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## Federal Rules of Civil Procedure

### Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

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THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

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COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

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